AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An optical line terminal device comprising:

an optical transmitter that receives downstream information, and outputs ~~a plurality of~~ downstream light pulses that represent the downstream information;

an optical receiver that receives ~~a plurality of~~ upstream light pulses and converts the upstream light pulses into upstream information; and

a controller connected to the optical transmitter and the optical receiver, the controller including:

a memory having a plurality of first memory cells that store a first identification number and a second plurality of memory cells that store a second identification number, the first identification number representing a first optical device that is associated with a network end point, the second identification number representing a second optical device that is associated with the network end point, the second optical device being a replacement for the first optical device; and

a processor connected to the memory that prepares the downstream information for the optical transmitter, and receives the upstream information from the optical receiver.

2. (Original) The device of claim 1 wherein the downstream information includes the first identification number when the first optical device is connected to the network end point, and the second identification number when the second optical device is connected to the network end point.

3. (Original) The device of claim 2 wherein the first identification number is removed from the downstream information and replaced with the second identification number when the first optical device fails to respond to the downstream information.

4. (Original) The device of claim 2 wherein the first optical device is an optical network terminal.

5. (Original) The device of claim 4 wherein the second optical device is an optical network terminal.

6. (Original) An optical line terminal device that comprises:

optical transmitter means for receiving downstream information, and outputting a plurality of downstream light pulses that represent the downstream information;

optical receiver means for receiving a plurality of upstream light pulses and converting the upstream light pulses into upstream information; and

controller means, the controller means including:

memory means for storing a first identification number and a second identification number, the first identification number representing a first optical device that is associated with a network end point, the second identification number representing a second optical device that is associated with the network end point, the second optical device being a replacement for the first optical device; and

processor means connected to the memory means for preparing the downstream information for the optical transmitter, and receiving the upstream information from the optical receiver.

7. (Original) The device of claim 6 wherein the downstream information includes the first identification number when the first optical device is connected to the network end point, and the second identification number when the second optical device is connected to the network end point.

8. (Original) The device of claim 7 wherein the first identification number is removed from the downstream information and replaced with the second identification number when the first optical device fails to respond to the downstream information.

9. (Original) The device of claim 7 wherein the first optical device is an optical network terminal.

10. (Original) The device of claim 9 wherein the second optical device is an optical network terminal.

11. (Previously Presented) A method of operating an optical line terminal (OLT), the method comprising:

periodically sending a first message to an end point to be received by a first optical device, the first message including a first identification number;

determining whether the first optical device has failed to respond to the first message a predetermined number of times; and

sending a second message to the end point to be received by a second optical device when the first optical device fails to respond the predetermined number of times, the second message having a second identification number that represents the second optical device, only one optical device being connected to the end point at a time.

12. (Previously Presented) The method of claim 11 and further comprising:

determining if the second optical device has responded to the second message with the second identification number; and

marking the second identification number as an active identification number when the second optical device responds to the second message.

13. (Previously Presented) The method of claim 12 and further comprising:

determining if the second optical device has responded to the second message with the second identification number; and

sending a third message with the first identification number that represents the first optical device when the second optical device fails to respond to a number of second messages.

14. (Previously Presented) The method of claim 13 and further comprising:

determining if the first optical device has responded to the third message with the first identification number; and

marking the first identification number as an active identification number when the second optical device responds to the third message.

15. (Previously Presented) The method of claim 13 and further comprising:

determining if the first optical device has responded to the third message with the first identification number; and

sending the second message with the second identification number that represents the second optical device when the first optical device fails to respond to a number of third messages.

16. (Original) The method of claim 11 wherein the first optical device is an optical network terminal.

17. (Original) The method of claim 16 wherein the second optical device is an optical network terminal.

18. (Previously Presented) A method of servicing a network, the network having a first optical device associated with a network end point, the first optical device having a first identification number, the method comprising:

associating a second identification number with the network end point so that the first optical device continues to receive network traffic until the second optical device responds to network traffic, the second identification number representing a second optical device that is a replacement for the first optical device; and

dispatching a technician to the network end point to service the network end point.

19. (Previously Presented) The method of claim 18 and further comprising:

removing the first optical device from the network end point; and

installing the second optical device to the network end point.

20. (Previously Presented) The method of claim 18 and further comprising:

inspecting the first optical device and determining whether the first optical device can be fixed within a predefined period of time;

fixing the first optical device when the first optical device can be fixed within the predefined period of time;

removing the first optical device from the network end point when the first optical device can not be fixed within the predefined period of time; and

installing the second optical device to the network end point after the first optical device has been removed.

21. (New) A network device comprising:

a memory to store a number of first identifiers that represent a number of ends of a number of cables in a network, a number of second identifiers that represent a number of first network devices that are connected to the ends of the cables, and a third identifier that represents a second network device, each second identifier being associated with a first identifier, the third identifier being associated with a second identifier so that the end of a single cable has a first identifier, an associated second identifier, and an associated third identifier; and

a processor connected to the memory to generate information to be sent to the ends of the cables which have a first identifier and an associated second identifier.

22. (New) The network device of claim 21 wherein the information generated by the processor includes a second identifier of a first network device when the first network device responds to the information, and a third identifier of a second network device only when the first network device fails to respond to the information a predetermined number of times.

23. (New) The network device of claim 21 wherein the number of third identifiers is less than the number of second identifiers.

24. (New) A method of servicing a network having an end of a cable and a functioning network device connected to the end of the cable, the method comprising:

associating a replacement network device to the functioning network device only when the functioning network device is to be removed so that the functioning network device continues to receive network information;

detecting when the functioning network device no longer receives the network information; and

sending the network information to the replacement network device when the functioning network device no longer receives the network information.

25. (New) The method of claim 24 wherein the functioning network device is fully functioning.

26. (New) The method of claim 24 wherein the functioning network device is only partially functioning.

27. (New) The method of claim 26 and further comprising:

removing the functioning network device from the end of the cable after the replacement network device has been associated to the functioning network device;

reinstalling the functioning network device to the end of the cable if full functionality can be provided with the functioning network device within a predetermined period of time;

installing the replacement network device to the end of the cable if full functionality can not be provided with the functioning network device within a predetermined period of time; and

alternately sending the network information to the functioning network device and the replacement network device until one of the devices receives the network information.